

Application No.: 10/038,404

Docket No.: 10253-00146-US

REMARKS

The outstanding Office Action and applied art have been carefully considered. Claims 1, 2 and 4-18 are pending in the application. Claims 19-27 have been previously withdrawn from consideration. Claim 1 has been amended by way of the present amendment.

In the outstanding Office Action, claims 1-18 were rejected under 35 U.S.C. §112, 2nd paragraph, as failing to set forth the subject matter which applicant(s) regard as the invention; and claims 1-10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Huffman (U.S. Patent No. 4,043,749) or Kelley (U.S. Patent No. 5,131,918) or Anton (U.S. Patent No. 4,078,378) in view of Elgarhy et al (U.S. Patent No. 5,549,963), Elgarhy (U.S. Patent No. 5,681,620), Collier (U.S. Patent No. 6,387,448) and Pacifici (U.S. Patent No. 5,925,149).

Claim 1 has been amended to clarify the invention. In particular, claim 1 has been amended to recite:

~~drying using infra-red to dry the article~~ in a drying zone having a temperature in the range from seventy-five degrees Celsius to ninety-five degrees Celsius (75-95 °C) for a time sufficient to allow the stainblocker composition to react with the nylon yarn in the textile surface.

Support for the amendment is provided at least at page 14, line 24 to page 15, line 25; and shown at least in FIG 3, reference 28' of the specification. Therefore, Applicants respectfully submit the amendment raises no question of new matter.

35 U.S.C §112 Rejections

Claims 1-18 were rejected under 35 U.S.C. §112, 2nd paragraph, as failing to set forth the subject matter which applicant(s) regard as the invention. Applicants respectfully traverse the rejection.

The outstanding Office Action has noted that the arguments of the previous response emphasized avoidance of the use of steam in the method of the present invention. In particular, the outstanding Office Action suggests that this line of argument indicates steam would be a critical element of the invention and that "any critical limitations must be claimed."

However, it is respectfully submitted that the present response in no way suggests that

Application No.: 10/038,404

Docket No.: 10253-00146-US

steam or the avoidance of steam is a "critical limitation" of the present invention. Instead, the arguments of the present response are based on limitations that are positively and explicitly recited as a part of the amended claim language. Therefore, Applicants respectfully submit that the present claims do set forth the subject matter which Applicants regards as the invention and request the outstanding 35 U.S.C. §112, 2nd paragraph, rejection be withdrawn.

35 U.S.C §103 Rejections

Claims 1-18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Huffman or Kelly or Anton in view of Elgarhy et al., Elgarhy, Collier, and Pacifici. Applicants respectfully traverse the rejection.

Huffman teaches a process for dyeing nylon carpet using a cationic dye and an acid dye.¹ Kelly discloses the process for making multicolored carpet by dyeing the acid dyeable fibers a desired color while leaving the cationic portion undyed.² Anton discloses a polyamide filament that has an acid dyeable polyamide core surrounded by a cationic dyeable polyamide sheath.³ As indicated in the outstanding Office Action, Huffman, Kelly and Anton each disclose dyeing the polyamide fibers or carpets "with both acid dyes and cationic dyes."⁴

However, neither Huffman, Kelly nor Anton implicitly or explicitly disclose, as recited in claim 1:

Applying a *stainblocker composition* to the textile surface of the article (emphasis added).

That is, neither Hoffman, Kelly nor Anton disclose a dyed substrate with a stainblocker, as recited in claim 1 of invention.

Therefore, it is respectfully submitted that neither Hoffman, Kelly nor Anton, whether taken alone or in combination, disclose, suggest or make obvious the limitations of claimed invention and that claim 1, and claims dependent thereon, patentably distinguish thereover.

¹ Hoffman at column 2, lines 45 - 49.

² Kelley at column 2, lines 36 - 39.

³ Anton at Abstract.

⁴ Office Action mailed March 10, 2004, page 2, paragraph 4, and lines 1-3.

Application No.: 10/038,404

Docket No.: 10253-00146-US

Elgarhy et al discloses the method of making a partially phosphated and partially sulfonated resol resin.⁵ In particular, Elgarhy et al discloses using a "treating solution" for nylon 66 samples with 2.0% resol "at a pH of 2.5 and at 75°C for a period of 20 minutes."⁶ In addition, Elgarhy et al discloses that after the nylon sample is treated the sample is dried at 120°C for 20 minutes.⁷

However, Elgarhy et al nowhere discloses, as recited in amended claim 1:

using infra-red energy to dry the article in a drying zone having a temperature in the range from seventy-five degrees Celsius to ninety-five degrees Celsius (75-95 °C) for a time sufficient to allow the stainblocker composition to react with the nylon yarn in the textile surface (emphasis added).

That is, the claimed invention explicitly recites both a method for drying the fibers (i.e., "using infra-red energy to dry the article," as recited in claim 1) and a temperature range for drying the fibers (i.e., "75-95 °C," as recited in claim 1) that are patentably distinct from the method disclosed by Elgarhy et al.

Therefore, it is respectfully submitted that neither Hoffman, Kelly, Anton nor Elgarhy et al, whether taken alone or in combination, disclose, suggest or make obvious the limitations of claimed invention and that claim 1, and claims dependent thereon, patentably distinguish thereover.

Elgarhy discloses the process for imparting stain resistance, light fastness and wash fastness to a fibrous substrate.⁸ The chemical composition includes a water soluble sulfonated aromatic-aldehyde condensation product, and hydrofluorosilicic acid or a water soluble salt.⁹ The stain resist was padded onto the carpet and then the carpet was steamed for 3 minutes at 210°F (i.e., 99°C) without any pressure.¹⁰

However, Elgarhy nowhere discloses, as recited in claim 1:

using infra-red energy to dry the article in a drying zone having a temperature in the range from seventy-five degrees

⁵ Elgarhy et al at column 2, lines 45 - 48

⁶ *Id.* at column 8, lines 59 - 62.

⁷ *Id.* at column 12, lines 17-25.

⁸ Elgarhy at Abstract.

⁹ *Id.* at column 2, lines 55 - 60.

¹⁰ *Id.* at column 8, lines 4-9.

Application No.: 10/038,404

Docket No.: 10253-00146-US

Celsius to ninety-five degrees Celsius (75-95 °C) for a time sufficient to allow the stainblocker composition to react with the nylon yarn in the textile surface (emphasis added).

That is, the claimed invention explicitly recites both a method for drying the fibers (i.e., “using infra-red energy to dry the article,” as recited in claim 1) and a temperature range for drying the fibers (i.e., “75-95 °C,” as recited in claim 1) that are patentably distinct from the method disclosed by Elgarhy.

Therefore, it is respectfully submitted that neither Hoffman, Kelly, Anton nor Elgarhy, whether taken alone or in combination, disclose, suggest or make obvious the limitations of claimed invention and that claim 1, and claims dependent thereon, patentably distinguish thereover.

Collier et al discloses the method of treating a substrate for bleach resistance.¹¹ In particular, Collier et al discloses that the chemical composition includes a component selected from the groups of an anionically modified phenol formaldehyde polymer, a naphthalene condensate, a lignin sulfonate, methacrylic polymer; polyester; and water.¹² Further, Collier et al discloses steam is used with a stain resist product and the steam time is from 2 to 8 minutes.¹³ Moreover, Collier et al discloses that the substrate is dried either with forced air or microwave heat.¹⁴

However, Collier nowhere discloses, as recited in claim 1:

using infra-red energy to dry the article in a drying zone having a temperature in the range from seventy-five degrees Celsius to ninety-five degrees Celsius (75-95 °C) for a time sufficient to allow the stainblocker composition to react with the nylon yarn in the textile surface (emphasis added).

That is, the claimed invention explicitly recites both a method for drying the fibers (i.e., “using infra-red energy to dry the article,” as recited in claim 1) and a temperature range for drying the fibers (i.e., “75-95 °C,” as recited in claim 1) that are patentably distinct from the method disclosed by Collier.

¹¹ Collier et al at Abstract.

¹² *Id.* at Abstract.

¹³ *Id.* at column 7, lines 45 – 50.

¹⁴ *Id.* at column 7, lines 53 – 55.

Application No.: 10/038,404

Docket No.: 10253-00146-US

In addition, including steam in the method accelerates the bleeding process that the claimed invention is attempting to avoid. Thus, Collier et al teaches away the claimed invention by using steam.

Therefore, it is respectfully submitted that neither Hoffman, Kelly, Anton nor Collier, whether taken alone or in combination, disclose, suggest or make obvious the limitations of claimed invention and that claim 1, and claims dependent thereon, patentably distinguish thereover.

Pacifici discloses a method of dyeing nylon fiber with a first anionic dye and treated with a stainblocker.¹⁵ In addition, Pacifici discloses the dyed nylon fiber is mixed with the nylon fiber *untreated by a stainblocker*. Further, Pacifici discloses the fiber is dyed with a second anionic dye of a color different from the color of the first anionic dye.¹⁶

However, Pacifici nowhere discloses, as claim 1, recites:

using infra-red energy to dry the article in a drying zone having a temperature in the range from seventy-five degrees Celsius to ninety-five degrees Celsius (75-95 °C) for a time sufficient to allow the stainblocker composition to react with the nylon yarn in the textile surface (emphasis added).

That is, the claimed invention explicitly recites both a method for drying the fibers (i.e., "using infra-red energy to dry the article," as recited in claim 1) and a temperature range for drying the fibers (i.e., "75-95 °C," as recited in claim 1) that are patentably distinct from the method disclosed by Pacifici.

Therefore, it is respectfully submitted that neither Hoffman, Kelly, Anton nor Pacifici, whether taken alone or in combination, disclose, suggest or make obvious the limitations of claimed invention and that claim 1, and claims dependent thereon, patentably distinguish thereover.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

¹⁵ Pacifici at Abstract.

¹⁶ *Id.* at column 3, lines 61 - 65.

Application No.: 10/038,404

Docket No.: 10253-00146-US

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 10253-00146-US from which the undersigned is authorized to draw.

Dated: June 9, 2004
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Respectfully submitted,

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